

REMARKS/ARGUMENTS

Claims 1-23 are pending in the present application and stand rejected.

Claims 8-20 and 22 are rejected under 35 USC 112 as being based on a disclosure that is not enabling.

Claims 1-5, 7, 21, and 23 are rejected under 35 USC 102 as being anticipated by United States Patent Application Publication 2003/0152076 to Lee et al. (hereinafter "Lee").

Claim 6 is rejected under 35 USC 103 as being unpatentable over Lee in view of what has been characterized as admitted prior art.

Claims 8 and 17 are amended according to the specification. No new matter has been added.

Rejections under Section 112

A. Claim 8

Claim 8 is rejected based on its recitation of "one of said pipeline stages..." According to the Examiner, this limitation is not enabled in view of the discussion of Figure 2 provided at pages 8-9. Claims 9-12 are rejected as being dependent on a rejected claim. See, Office Action at ¶1.

As disclosed by Applicant, the number of pipeline stages k depends upon the size of the encapsulation packet (p. 8) to be processed and can be as small as $k=2$ (p. 9). Applicant respectfully submits that the specification is therefore enabling as to the original claim language of "one of said pipeline stages." See e.g., p. 9 ("Although the exemplary embodiments of FIGURE 2 show $k \geq 7$, FIGURE 2 is illustrative only, and it should be readily understood that k can be as small as $k = 2$, such that the pipeline would consist of the HEAD portion, together with stages S1 and S2.")

Nevertheless, in the interest of advancing prosecution, claim 8 is amended to recite "at least one of said pipeline stages..." It is believed that this amendment addresses the underlying source of the Examiner's concerns. Accordingly, withdrawal of the rejection of claims 8-12 under 35 USC 112 is respectfully requested.

A. Claims 13, 17, 21

Claims 13, 17, and 21 are rejected based upon their recitation of “combining” data segments. Claim 13, for example, recites “combining, in said another pipeline stage, part of a data segment currently held in said one pipeline stage with a data segment currently held in said another pipeline stage.” The Examiner argues “...there is no mention of combining data segments anywhere in the disclosure; all that is mentioned is forwarding data segments to parallel stages, but no combination.” *See*, Office Action at ¶1. Applicant respectfully disagrees.

According to the Compact Oxford English Dictionary, the primary definition of the word “combine” is to “join or mix together.” As disclosed and claimed, one data segment is *combined* with a portion of another data segment in a particular stage of the data pipeline. In other words, the data is “joined together” in one and the same pipeline stage. Accordingly, Applicant respectfully submits that the specification fully enables “combining” as it is recited in claims 13, 17, and 21 and incorporated into the dependent claims. Withdrawal of the rejections under 35 USC 112 is respectfully requested.

Claim 17 is additionally rejected based upon its recitation of “a temporal position in said sequence.” An encapsulation packet “formatted as a sequence of parallel data segments,” is processed, in part, by “...combining a first of said parallel data segments and part of a second of said parallel data segments at a temporal position in said sequence occupied by said first parallel data segment.” As disclosed in the specification, embodiments of the invention can accomplish this by transferring the encapsulation packet segment-by-segment through a data pipeline. *See e.g.*, p. 13. It is well-known in the art to process data according to a clock signal. Thus, a person of skill in the art would recognize that, in addition to having a position in the formatted sequence, a data segment also has a temporal position. Therefore, Applicant again submits that a “temporal position” is supported by the specification and claims as originally filed.

However, in the interest of advancing prosecution of the present application, claim 17 is amended to remove the modifier “temporal” without changing the scope of the original claim. Based upon the preceding amendments and discussion, Applicant respectfully

submits that each claim is fully enabled by the specification and hereby requests withdrawal of the rejections under 35 USC 112.

Rejections under Section 102

A. Claim 1

Claim 1 recites an apparatus for processing an encapsulation packet including an encapsulating header and an encapsulated packet. The apparatus comprises “a modifier coupled to said data pipeline for *modifying said encapsulating header in response to first information contained in said encapsulated packet*; and selection logic... having an input for receiving selectively programmable second information indicative of a location of said first information within said encapsulated packet, said *selection logic responsive to said second information for routing said first information from said data pipeline to said modifier*” (emphasis added). Lee does not disclose at least these features.

The Examiner cites Lee’s protocol translator unit 315 as teaching both a modifier and selection logic as claimed. See, Office Action at ¶2 (Applicant notes that the logic shown in Fig. 13 is part of protocol translator unit 315). According to the Examiner, “modifying is stripping header information and the POPOFF field is the first information giving a starting point to begin stripping header bytes.” Id. Applicant respectfully disagrees.

As disclosed by Lee, the POPOFF field is part of a policy control instruction (PCI). See, Lee at [0188] (“In this embodiment, the ‘pop-header offset field’ (‘POPOFF’) in the PCI defines the offset that the protocol translator unit 315 uses for the starting point to strip off bytes from the packet.”). The PCI is *separate from* the information element being processed. When an incoming information element is received, the PCI is fetched from an external memory. See, Lee at [0087]. This results in a processing delay being incurred while the PCI is being fetched from the memory and stored in the EXE pipeline stage. Id.

Unlike the claimed invention, Lee does not disclose that an encapsulating header is modified in response to first information contained within the encapsulation packet. Lee does not teach or suggest a modifier that operates in response to first information contained within the encapsulation packet to modify the encapsulation header, or selection logic that routes the first

information from the data pipeline to the modifier in response to second information. Accordingly, Lee does not teach or suggest each and every element as set forth in the claim. Reconsideration and allowance of claim 1 is therefore respectfully requested.

B. Claims 21, 23

Claim 21 and 23 recite limitations similar to those discussed in connection with claim 1 and each is believed allowable over Lee for at least the reasons previously given. Specific portions of each claim are identified below for convenience.

Claim 21 recites “receiving selectively programmable first information indicative of a location of second information within said encapsulated packet; based on said first information, *obtaining said second information from said encapsulated packet; and modifying said encapsulating header based on said second information.*” Lee does not disclose or suggest obtaining second information from an encapsulated packet and modifying an encapsulation header based on the second information.

Claim 23 recites “means for receiving selectively programmable first information indicative of a location of second information within said encapsulated packet; means for obtaining said second information from said encapsulated packet based on said first information; and means for modifying said encapsulating header based on said second information.” Lee does not disclose or suggest at least these limitations.

C. Claims 2-7

Claims 2-7 depend from claim 1 and each incorporates the limitations as discussed above. Accordingly, each dependent claim is believed allowable for at least the reason that it depends from an allowable base claim in addition to being allowable based upon its further limitations.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

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Reply to Office Action of February 5, 2008

PATENT

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 858-350-6100.

Respectfully submitted,



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